Please add the following claims:

7.   A method as recited in claim 1 further comprising inserting a plurality of inversion bits into the transmittable data packet, wherein the plurality of inversion bits maintain DC balance and control run length.

8.   A method of decoding an encoded message received over an interconnect link in a network, the method comprising:
      receiving an encoded data packet having a received CRC segment and a payload segment;
      calcuating a first CRC value using the payload segment;
      decoding the first CRC using a plurality of inversion bits;
      decoding the received CRC using the plurality of inversion bits;
      comparing the first CRC and the received CRC thereby determining whether the encoded message was received with any errros.

9.   A method as recited in claim 8 further comprising removing the plurality of inversion bits from the encoded message.

10.   A method as recited in claim 8 further comprising determining whether an error in the encoded message resulted from a transmission error.

11.   A method as recited in claim 10 further comprising comparing a first plurality of preselected bits in the received CRC with a second plurality of preselected bits in the first CRC.

12.   A method as recited in claim 11 wherein both the first plurality of preselected bits and the second plurality of preselected bits have the same bit positions.

13.   A method as recited in claim 8 further comprising determining whether an error in the encoded message resulted from a non-transmission error.

14.   A method as recited in claim 13 further comprising comparing a third plurality of preselected bits in the received CRC with a fourth plurality of preselected bits in the first CRC.

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